The California Energy Commission Transforming Transportation

Transportation accounts for a major portion of California's energy budget and has a significant impact on air quality. It is also the single largest source of the state's greenhouse gas emissions.

Since 1975, the California Energy Commission has promoted a secure, affordable, reliable, and environmentally sound transportation energy infrastructure by ensuring that:

- » The supply, production, distribution, and price of petroleum fuels and other blending components are available to meet demand.
- » Viable alternative, low-carbon, and renewable fuel options exist, and private sector interest is leveraged to build and expand refinery capacity and infrastructure to accommodate greater imports, distribution, and fuel supply storage.

Advancing Alternatives Through Diversification

California leads the nation in attracting venture capital by partnering with the private sector to leverage funds and develop alternative transportation fuels and advanced vehicle technologies. The Energy Commission administers the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) that provides up to \$100 million per year for the development and deployment of existing and emerging low-carbon alternative fuels, alternative fueling infrastructure, and advanced vehicle technologies. Each funded project accelerates California's transition to cleaner more sustainable sources of energy for transportation.

Through the program, the Energy Commission is helping develop locally produced, low-carbon alternative fuels such as biogas, hydrogen, biodiesel and renewable diesel, and ethanol. The Energy Commission also awards grants to fund the installation of electric vehicle charging stations, as well as fueling stations for vehicles that use natural gas, hydrogen, and E-85, a mixture of ethanol and gasoline. Funding is also available for the commercialization of advanced vehicle technologies and supports functions such as outreach and marketing, workforce training, and studies on sustainable industry practices.

The program is designed to help California businesses and entrepreneurs develop and deploy the next generation of alternative fuels and advanced transportation technologies while leveraging federal funds and attracting private investment. The projects funded under the ARFVTP create new jobs, while advancing fuel and vehicle technology that support California's greenhouse gas, air pollution, and petroleum reduction goals.

Investing in Alternatives

Each year the Energy Commission develops an ARFVTP investment plan that establishes the funding priorities and strategies that reflect program goals and provide opportunities to complement and leverage existing public and private investments. The program's Advisory Committee – consisting of representatives from private industry, government, nonprofit groups, and the public – provides valuable input in developing the annual investment plan.

The program's strategic goals for allocating funding include:

- » Supporting the deployment of zero-emission vehicles (ZEVs) by funding electric and hydrogen vehicle infrastructure to accommodate 1.5 million ZEVs by 2025.
- » Supporting near-zero-emission transportation by focusing on natural gas and E85 retail fueling stations, and biodiesel wholesale fueling terminals.
- » Supporting the shift in medium-duty and heavy-duty truck fleets from diesel to natural gas to realize early carbon reduction benefits.
- » Supporting zero-emission truck technologies to meet long-term carbon and criteria emission reduction goals.
- » Supporting feasibility studies, demonstrations, and commercial production of advanced technology biofuels, and avoiding the use of food crops and prime agricultural soils for feedstock production by focusing on wastebased resources and alternative feedstocks.

Investments in alternative transportation fuels and advanced vehicle technologies are a long-term undertaking that is essential if California is to achieve its greenhouse gas reduction goals, improve local air quality, and reduce its dependence on petroleum fuel.

Monitoring and Tracking California's Petroleum

Under the Petroleum Industry Information Reporting Act (PIIRA), the Energy Commission collects data from refiners, producers, petroleum product transporters and marketers, and petroleum pipeline and terminal operators. Each entity is required to submit to the Energy Commission weekly, monthly, and annual reports on receipts, inventory levels, imports, exports, prices, and transportation sources. The Energy Commission analyzes and interprets this information to provide policy makers and the public with key insights on oil supply and demand fluctuations and potential issues.

